

Title (en)
Process and installation for the treatment of water

Title (de)
Verfahren und Anlage zur Behandlung von Wasser

Title (fr)
Procédé et installation de traitement d'eau

Publication
EP 0903324 A3 20010516 (DE)

Application
EP 98250318 A 19980908

Priority
DE 19741117 A 19970912

Abstract (en)
[origin: EP0903324A2] In the preparation of drinking water by cleaning waste water from a filter bed, back flushing returns a portion of the sludge to the incoming raw water under controlled conditions inoculating the water to stimulate the filtration process. The water is passed through a series of gravel filters (1a, 1b) to remove unwanted substances such as iron and manganese compounds. The filters are separately back flush cleaned from time to time. The sludge residues are processed in a module comprising a compensation holding tank (2), followed by an increase in pressure and sedimentation of the sludge from water on a base (34) within a sedimentation zone (36) for recovery of the clear water. The water bearing the sludge is conveyed through a pressurized system (23) and sedimentation unit (3). During its passage through the sedimentation unit, the flow is reversed and the flow speed is changed twice. The raw water is continually dosed with Fe³⁺ ions at a concentration of 5-50 mg/l. The total content of Fe²/Fe³ is 0.5-15 mg/l at the filter inlet (11). The system pressure of the entire assembly is approximately uniform. The first filtrate released after the filter back-flush process is held in a temporary storage vessel (4), or is returned to the raw incoming water side of the assembly via the pressurized system (23).

IPC 1-7
C02F 9/00; C02F 1/00; B01D 21/00; B01D 35/12

IPC 8 full level
B01D 21/00 (2006.01); **B01D 35/12** (2006.01); **C02F 1/00** (2006.01); **C02F 1/64** (2006.01); **C02F 9/00** (2006.01); **C02F 1/32** (2006.01)

CPC (source: EP)
B01D 21/0006 (2013.01); **B01D 21/0012** (2013.01); **B01D 21/0042** (2013.01); **B01D 21/0057** (2013.01); **B01D 21/02** (2013.01); **B01D 21/2405** (2013.01); **B01D 35/12** (2013.01); **C02F 1/64** (2013.01); **C02F 1/001** (2013.01); **C02F 1/32** (2013.01); **C02F 2001/007** (2013.01); **C02F 2101/203** (2013.01); **C02F 2101/206** (2013.01); **C02F 2303/16** (2013.01)

Citation (search report)
• [DA] DE 3800613 A1 19890720 - IWTS CONSULTING ENGINEERS GMBH [DE]
• [A] BE 833673 A 19760116
• [A] FR 2026341 A1 19700918 - PERMUTIT AG
• [A] CH 620661 A5 19801215 - BLATTER MAX

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DE19962791A1; US6852228B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
DE 19741117 A1 19990318; **DE 19741117 C2 20020516**; DE 59803826 D1 20020523; EP 0903324 A2 19990324; EP 0903324 A3 20010516; EP 0903324 B1 20020417

DOCDB simple family (application)
DE 19741117 A 19970912; DE 59803826 T 19980908; EP 98250318 A 19980908